

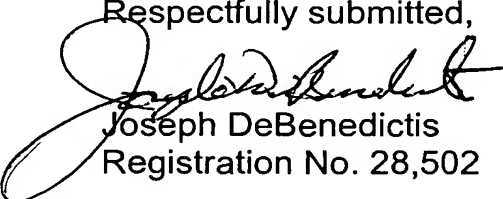
REMARKS/ARGUMENTS

This preliminary amendment is supplemental to the preliminary amendment filed on March 23, 2004. The present supplemental preliminary amendment together with the previously filed preliminary amendment incorporate all of the amendments made to the specification, drawings and sequence listings made by applicant in the corresponding parent application no. 09/147,405 which has been allowed. The present supplemental preliminary amendment also includes a submission of the most recent paper copy of the sequence listing filed in parent application no. 09/147,405. A computer readable form of the sequence listing is not submitted herewith. In lieu of the computer readable form of the sequence listing, applicant submits herewith a letter requesting use of the computer readable form of the sequence listing from the aforementioned parent application in accordance with the provisions of 37 CFR § 1.821(e).

The below signed attorney hereby states that the paper copy of the "Sequence Listing" submitted herewith is identical to the computer readable copy found in the aforementioned parent application, the use of which applicant requests in the present application. The below signed attorney also hereby states that the computer readable copy which is requested to be used in the present application and the paper copy of the sequence listing submitted herewith includes no new matter.

Date: April 29, 2004

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Respectfully submitted,

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ANNOTATED SHEETS SHOWING CHANGES

Fig. 6A *changed "Fig. 6" to "Fig. 6 A"*

→S
TACATTGAAATAGTCAAAGAAAAGGAGTTTATGATTAATAAAAAAATAATTTACTAA-60
M I N K K N N L L -9

CTAAAAAGAAACCTATAGCAAATAAATCCAATAAATATGCAATTAGAAAATTCACAGTAG-120
T K K K P I A N K S N K Y A I R K F T V -29

GTACAGCGTCTATTGTAATAGGTGCAACATTATTGTTTGGTTTAGGTCATAATGAGGCCA-180
G T A S I V I G A T L L F G L G H N E A -49

→A
AAGCCGAGGAGAATTCAGTACAAGACGTTAAAGATTCTGAATACGGATGATGAATTATCAG-240
K A E E N S V Q D V K D S N T D D E L S -69

ACAGCAATGATCAGTCTAGTGATGAAGAAAAGAATGATGTGATCAATAATAATCAGTCAA-300
D S N D Q S S D E E K N D V I N N N Q S -89

TAAACACCGACGATAATAACCAAATAATTAAAAAGAAGAAACGAATAACTACGATGGCA-360
I N T D D N N Q I I K K E E T N N Y D G -109

TAGAAAAACGCTCAGAAGATAGAACAGAGTCAACAACAAATGTAGATGAAAACGAAGCAA-420
I E K R S E D R T E S T T N V D E N E A -129

CATTTTACAAAAGACCCCTCAAGATAATACTCATCTTACAGAAGAAGAGGTAAAAGAAT-480
T F L Q K T P Q D N T H L T E E E V K E -149

CCTCATCAGTCTGAATCCTCAAATTCATCAATTGATACTGCCCAACAACCATCTCACACAA-540
S S S V E S S N S S I D T A Q Q P S H T -169

CAATAAATAGAGAAGAATCTGTTCAAACAAGTGATAATGTAGAAGATTCACACGTATCAG-600
T I N R E E S V Q T S D N V E D S H V S -189

ATTTTGCTAACTCTAAAATAAAAGAGAGTAACACTGAATCTGGTAAAGAAGAGAATACTA-660
D F A N S K I K E S N T E S G K E E N T -209

TAGAGCAACCTAATAAAGTAAAAGAAGATTCAACAACAAGTCAGCCGTCTGGCTATACAA-720
I E Q P N K V K E D S T T S Q P S G Y T -229

ATATAGATGAAAAAATTTCAAATCAAGATGAGTTATTAAATTTACCAATAAATGAATATG-780
N I D E K I S N Q D E L L N L P I N E Y -249



ANNOTATED SHEETS SHOWING CHANGES

Fig. 6B

changed "Fig. 6 continued"
to "Fig. 6B"

AAAATAAGGCTAGACCATTATCTACAACATCTGCCCAACCATCGATTAAACGTGTAACCG-840
E N K A R P L S T T S A Q P S I K R V T -269

TAAATCAATTAGCGGCGGAACAAGGTTCTGAATGTAAACCATTTAATTAAAGTTACTGATC-906
V N Q L A A E Q G S N V N H L I K V T D -289

AAAGTATTACTGAAGGATATGATGATAGTGAAGGTGTTATTAAAGCACATGATGCTGAAA-962
Q S I T E G Y D D S E G V I K A H D A E -309

ACTTAATCTATGATGTAACCTTTTGAAGTAGATGATAAGGTGAAATCTGGTGATACGATGA-1020
N L I Y D V T F E V D D K V K S G D T M -329

CAGTGGATATAGATAAGAATACAGTTCATCAGATTTAACCAGATAGCTTTACAATACCAA-1080
T V D I D K N T V P S D L T D S F T I P -349

AAATAAAAGATAATTCTGGAGAAATCATCGCTACAGGTACTTATGATAACAAAAATAAAC-1140
K I K D N S G E I I A T G T Y D N K N K -369

AAATCACCTATACTTTTACAGATTATGTAGATAAGTATGAAAATATTAAAGCACACCTTA-1200
Q I T Y T F T D Y V D K Y E N I K A H L -389

AATTAACGTCATACATTGATAAATCAAAGGTTCCAAATAATAATACCAAGTTAGATGTAG-1260
K L T S Y I D K S K V P N N N T K L D V -409

AATATAAAACGGCCCTTTCATCAGTAAATAAAACAATTACGGTTGAATATCAAAGACCTA-1320
E Y K T A L S S V N K T I T V E Y Q R P -429

ACGAAATCGGACTGCTAACCTTCAAAGTATGTTTACAAATATAGATACGAAAAATCATA-1380
N E N R T A N L Q S M F T N I D T K N H -449

CAGTTGAGCAAACGATTTATATTAAACCCTCTTCGTTATTCAGCCAAGGAAACAAATGTAA-1440
T V E Q T I Y I N P L R Y S A K E T N V -469

ATATTTTCAGGGAATGGTGATGAAGGTTCAACAATTATAGACGATAGCACAATAATTAAAG-1500
N I S G N G D E G S T I I D D S T I I K -489

TTTATAAGGTTGGAGATAATCAAAATTTACCAGATAGTAACAGAATTTATGATTACAGTG-1560
V Y K V G D N Q N L P D S N R I Y D Y S -509

AATATGAAGATGTCACAAATGATGATTATGCCCAATTAGGAAATAATAATGATGTGAATA-1620
E Y E D V T N D D Y A Q L G N N N D V N -529

TTAATTTTGGTAATATAGATTCACCATATATTATTAAAGTTATTAGTAAATATGACCCTA-1680
I N F G N I D S P Y I I K V I S K Y D P -549



ANNOTATED SHEETS SHOWING CHANGES

Fig. 6C

changed "Fig. 6 continued"
to "Fig. 6 C"

ATAAGGATGATTACACGACTATACAGCAAACCTGTGACAATGCAGACGACTATAAATGAGT-1740
N K D D Y T T I Q Q T V T M Q T T I N E -569

ATACTGGTGAGTTTAGAACAGCATCCTATGATAATACAATTGCTTTCTCTACAAGTTCAG-1800
Y T G E F R T A S Y D N T I A F S T S S -589

GTCAAGGACAAGGTGACTTGCCTCCTGAAAAAATTATAAAATCGGAGATTACGTATGGG-1860
G Q G Q G D L P P E K T Y K I G D Y V W -609
AAGATGTAGATAAAGATGGTATTCAAATAACAATGATAATGAAAAACCGCTTAGTAATG-1920
E D V D K D G I Q N T N D N E K P L S N -629

TATTGGTAACTTTGACGTATCCTGATGGAACCTCAAATCAGTCAGAACAGATGAAGATG-1980
V L V T L T Y P D G T S K S V R T D E D -649

GGAAATATCAATTTGATGGATTGAAAAACGGATTGACTTATAAAATTACATTCGAAACAC-2040
G K Y Q F D G L K N G L T Y K I T F E T -669

CTGAAGGATATACGCCGACGCTTAAACATTCAAGGAACAAATCCTGCACTAGACTCAGAAG-2100
P E G Y T P T L K H S G T N P A L D S E -689

GTAATTCTGTATGGGTAACCTATTAATGGACAAGACGATATGACGATTGATAGTGGATTTT-2160
G N S V W V T I N G Q D D M T I D S G F -709

ATCAAACACCTAAATACAGCTTAGGGAACCTATGTATGGTATGACACTAATAAAGATGGTA-2220
Y Q T P K Y S L G N Y V W Y D T N K D G -729

TTCAAGGTGATGATGAAAAAGGAATCTCTGGAGTTAAAGTGACGTTAAAGATGAAAACG-2280
I Q G D D E K G I S G V K V T L K D E N -749

GAAATATCATTAGTACAACCTACAACCGATGAAAATGGAAGTATCAATTTGATAATTTAA-2340
G N I I S T T T T D E N G K Y Q F D N L -769

ATAGTGGTAATTATATTGTTTCATTTTGATAAACCTTCAGGTATGACTCAAACAACAACAG-2400
N S G N Y I V H F D K P S G M T Q T T T -789

ATTCTGGTGATGATGACGAACAGGATGCTGATGGGGAAGAAGTTCATGTAACAATTACTG-2460
D S G D D D E Q D A D G E E V H V T I T -809

→R
ATCATGATGACTTTAGTATAGATAACGGATACTATGATGACGAATCGGATTCCGATAGTG-2520
D H D D F S I D N G Y Y D D E S D S D S -829

ACTCAGACAGCGACTCAGATTCCGATAGTGATTCACTCCGATAGCGACTCGGATTCAG-2580
D S D S D S D S D S D S D S D S D S -849

ANNOTATED SHEETS SHOWING CHANGES



Fig. 6D

changed "Fig. 6 continued"
to "Fig. 6D"

ACAGCGACTCAGATTCAGACAGCGACTCGGATTCTGATAGCGACTCGGATTCAGACAGCG-2640
D S D S D S D S D S D S D S D S D S D S -869

ACTCAGACTCAGACAGTGATTTCAGATTCAGACAGCGACTCAGATTCCGATAGTGATTTCAG-2700
D S D S D S D S D S D S D S D S D S D S -889

ACTCAGACAGCGACTCAGATTCTGATAGTGATTTCAGACTCAGACAGTGATTTCAGATTCAG-2760
D S D S D S D S D S D S D S D S D S D S -909

ACAGCGACTCAGATTCCGATAGTGATTTCAGACTCAGACAGCGACTCAGATTCCGATAGTG-2820
D S D S D S D S D S D S D S D S D S D S -929

ATTCAGACTCAGACAGCGACTCAGATTCTGATAGTGATTTCAGACTCAGACAGTGATTTCAG-2880
D S D S D S D S D S D S D S D S D S D S -949

ACTCAGACAGTGATTTCAGATTCCGATAGTGATTTCAGACTCCGATAGCGACTCAGACTCGG-2940
D S D S D S D S D S D S D S D S D S D S -969

ATAGTGACTCAGATTCTGATAGTGATTTCAGACTCCGATAGCGACTCAGACTCCGATAGTG-3000
D S D S D S D S D S D S D S D S D S D S -989

ACTCAGATTCTGATAGTGATTTCAGACTCAGACAGCGACTCAGATTCTGATAGTGATTTCAG-3060
D S D S D S D S D S D S D S D S D S D S -1009

ACTCAGTCAGTGATTTCAGATTCCGATAGTGATTTCAGACTCAGGCAGTGATTCCGATTCCG-3120
D S V S D S D S D S D S D S G S D S D S -1029

R←

ATAGTGATTTCAGACTCAGACAACGACTCAGATTTAGGCAATAGCTCAGATAAGAGTACAA-3180
D S D S D S D N D S D L G N S S D K S T -1049

→M

AAGATAAATTACCTGATACAGGAGCTAATGAAGATTATGGCTCTAAAGGCACGTTACTTG-3240
K D K **L P D T G** A N E D Y G S K G T L L -1069

bold printed these letters

GAAGTCTGTTTGCAGGTTTAGGAGCGTTATTATTAGGGAAACGTCGCAAAAATAGAAAA-3300
G T L F A G L G A L L L G K R R K N R K -1089

ATAAAAATTAAAATGTTCAAATGAAATTTGTAGAAAGAAGCAGATATGAGATTTGAATAG-3360
N K N * -1092

AAAGTAGATTTAGTCCAACAAATGTAAGATGTTGATTAAAACTATAATATACTTTACG-3420



ANNOTATED SHEETS SHOWING CHANGES

Fig. 6E

*changed "Fig. 6 continued"
to "Fig. 6 E"*

TTTATCATATCTTGTGAAAAAGATGATGCAAACAAGGTCATTTCTATTAAAAATGACTTA-3480

AATGTATGATTTTTAGAGAAACATATACAACCTCACAATCTGACAATGATTTAATAGAGGA-3540

ACCGTGAATTTTAAATGAATTCATGGTTCCTTTTATTGAATTAATAAAAAATTCTTTTAT-3600